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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/532,884	04/27/2005	Joung-Tae Chung	0002251USU/3062	2262
27623	7590	07/05/2006	EXAMINER	
OHLANDT, GREELEY, RUGGIERO & PERLE, LLP ONE LANDMARK SQUARE, 10TH FLOOR STAMFORD, CT 06901			RIVERO, ALEJANDRO	
			ART UNIT	PAPER NUMBER
			2618	
DATE MAILED: 07/05/2006				

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b> 10/532,884	<b>Applicant(s)</b> CHUNG ET AL.	
	<b>Examiner</b> Alejandro Rivero	<b>Art Unit</b> 2618	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 27 April 2005.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-6 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-6 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 27 April 2005 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \*    c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)  | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## **DETAILED ACTION**

### ***Specification***

1. Applicant is reminded of the proper language and format for an abstract of the disclosure. The abstract should be in narrative form and generally limited to a single paragraph on a separate sheet within the range of 50 to 150 words. It is important that the abstract not exceed 150 words in length since the space provided for the abstract on the computer tape used by the printer is limited. The form and legal phraseology often used in patent claims, such as "means" and "said," should be avoided. The abstract should describe the disclosure sufficiently to assist readers in deciding whether there is a need for consulting the full patent text for details. The language should be clear and concise and should not repeat information given in the title. It should avoid using phrases which can be implied, such as, "The disclosure concerns," "The disclosure defined by this invention," "The disclosure describes," etc.

The abstract of the disclosure is objected to because it exceeds 150 words. Correction is required. See MPEP § 608.01(b).

2. The title of the invention is not descriptive. A new title is required that is clearly indicative of the invention to which the claims are directed. The following title is suggested: DATA MONITORING SYSTEM USING A SINGLE TIME AXIS WITH TIME INFORMATION PROVIDED BY A GPS RECEIVER.

### ***Claim Rejections - 35 USC § 112***

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

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4. Claims 1, 3, 4 and 6 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 1 recites the limitation "the global positioning system" in line 3. There is insufficient antecedent basis for this limitation in the claim.

Claim 1 recites the limitation "the MPMS" in line 10. There is insufficient antecedent basis for this limitation in the claim.

Claim 3 recites the limitation "the first and second packet data collecting devices" in line 6. There is insufficient antecedent basis for this limitation in the claim.

Claim 4 recites the limitation "the global positioning system" in lines 7-8. There is insufficient antecedent basis for this limitation in the claim.

Claim 6 recites the limitation "the first and second data communication monitoring steps " in lines 3-4. There is insufficient antecedent basis for this limitation in the claim.

### ***Claim Rejections - 35 USC § 102***

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

6. Claims 1 and 3-6 are rejected under 35 U.S.C. 102(e) as being anticipated by Ko et al. (US 2003/0100299 A1).

Consider claim 1 and the 35 U.S.C. 112 (second paragraph) rejection above, Ko et al. disclose a data monitoring system in a communication network (Abstract) comprising: a global position system (GPS) receiver to provide a time information received from the GPS (Paragraphs [0012], [0039] and [0059]); a first packet data collecting device (test mobile) to collect a communication protocol and a communication environment (QoS) information between a base station supporting a mobile communication service of a mobile station and a packet data serving node (PDSN, GPRS) supporting a data communication service of the mobile station with the time information provided by the GPS receiver (Paragraphs [0012], [0039], [0042], [0059] and [0098]-[0103]) and provide the collected information to an MPMS (Paragraphs [0098]-[0106], where Ko et al. disclose a computer and software to process the collected data) and a mobile station-packet data serving node monitoring system to receive at least one of a wireless communication environment, a data communication environment, and a mobile communication protocol of the mobile station from the mobile station along with the GPS time information (Paragraphs [0012], [0039], [0042], [0059] and [0103]), and receive at least one of a packet data communication environment and a data communication protocol of the mobile station from the first packet data collecting device along with the time information to monitor and analyze the received information on a single time axis (Paragraphs [0098]-[0103] and [0132]-[0137], figure 10).

Consider claim 3 and the 35 U.S.C. 112 (second paragraph) rejection above, Ko et al. disclose all the limitations as applied to claim 1 above and also disclose a computing device to receive the communication environment information and the communication protocol via the MPMS and store, monitor, and analyze the received information, the communication protocol and the communication environment information being received from at least one of the mobile station, the first and a second packet data collecting devices (Paragraphs [0098]-[0106], where Ko et al. disclose a computer and software to process the collected data).

Consider claim 4 and the 35 U.S.C. 112 (second paragraph) rejection above, Ko et al. disclose a data monitoring method in a communications network (Abstract) comprising: a first data communication network monitoring step of collecting at least one of a communication protocol and a communication environment (QoS) information between a base station supporting a mobile communication service of a mobile station and a packet data serving node (PDSN, GPRS) supporting a data communication service of the mobile station along with the global position system (GPS) time information receiver (Paragraphs [0012], [0039], [0042], [0059] and [0098]-[0103]); a mobile communication network monitoring step of collecting at least one of a wireless communication environment, a data communication environment, and a mobile communication protocol of the mobile station along with the GPS time information (Paragraphs [0012], [0039], [0042], [0059] and [0098]-[0106]); and a step of monitoring and analyzing the data collected in the first data communication monitoring step and the

mobile communication network monitoring step on a single time axis (Paragraphs [0098]-[0103] and [0132]-[0137], figure 10).

Consider claim 5, Ko et al. disclose all the limitations as applied to claim 4 above and also disclose a second data communication network monitoring step of collecting at least one of a data communication protocol and a packet data communication environment information between the PDSN and an application server along with the GPS time information (Paragraphs [0012], [0039], [0042], [0059] and [0098]-[0106], where Ko et al. disclose Internet connectivity, hence application servers); and a step of monitoring and analyzing the data collected in the second data communication network monitoring step and the mobile communication network monitoring step on a single time axis (Paragraphs [0098]-[0103] and [0132]-[0137], figure 10).

Consider claim 6 and the 35 U.S.C. 112 (second paragraph) rejection above, Ko et al. disclose all the limitations as applied to claim 4 above and also disclose a step of providing a computing device with the data collected in the mobile communication network monitoring step, the first and a second data communication monitoring steps, and storing, monitoring and analyzing the data (Paragraphs [0098]-[0106], where Ko et al. disclose a computer and software to process the collected data).

### ***Claim Rejections - 35 USC § 103***

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

9. Claim 2 is rejected under 35 U.S.C. 103(a) as being unpatentable over Ko et al. in view of Chen et al. (US 6,097,699).

Consider claim 2, Ko et al. disclose all the limitations as applied to claim 1 above and also disclose a packet data collecting device to collect at least one of a communication protocol and a communication environment information between the PDSN (GPRS) and an application server along with the time information provided from the GPS receiver (Paragraphs [0012], [0039], [0042], [0059] and [0098]-[0103]), and provide the received information to the MPMS (Paragraphs [0098]-[0106], where Ko et al. disclose a computer and software to process the collected data), wherein the MPMS receives at least one of the wireless communication environment, the data communication environment, and the mobile communication protocol of the mobile station from the mobile station along with the time information of the GPS receiver (Paragraphs [0012], [0039], [0042], [0059] and [0103]), receives at least one of the packet data communication environment and the data communication protocol of the mobile station from the packet data collecting device along with the time information,



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and monitors and analyzes the received information on a single time axis (Paragraphs [0098]-[0103] and [0132]-[0137], figure 10).

However, Ko et al. do not disclose a second packet data collecting device.

Chen et al. disclose a second packet data collecting device (Column 4 lines 50-54).

Therefore it would have been obvious to one of ordinary skill in the art at the time of the invention to use a second packet data collecting device, as taught by Chen et al., in the method of Ko et al. for the purpose of monitoring end-to-end QoS of a connection or group of connections in asynchronous networks (as suggested by Chen et al. in column 2 lines 50-66, column 3 lines 18-28 and column 10 lines 27-40).

### ***Conclusion***

10. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure:

Zhang et al. (US 5,535,193) disclose multiport analyzing with time stamp synchronizing.

Rogers (US 2004/0203897 A1) discloses testing in wireless networks.

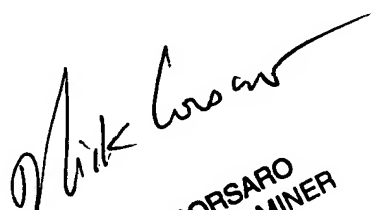
11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Alejandro Rivero whose telephone number is (571) 272-2839. The examiner can normally be reached M-F, 8:30AM-5:00PM. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nay Maung can be reached on (571) 272-7882. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300. Information

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regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



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